Printing date 09/16/2015 Reviewed on 06/02/2015

1 Identification

· Product identifier

· Trade name: PPC-1

· Article number: PPC-1

· Details of the supplier of the safety data sheet

· Manufacturer/Supplier: Chemical Consultants Inc. 1850 Wild Turkey Circle Corona, CA 92880

USA

+1 (951) 735-5511 ncollins@ccidom.com

- · Information department: Product safety department
- · Emergency telephone number: INFOTRAC 1-800-535-5053

2 Hazard(s) identification

· Classification of the substance or mixture



GHS02 Flame

Flam. Liq. 2 H225 Highly flammable liquid and vapor.



GHS08 Health hazard

Muta. 1B H340 May cause genetic defects.

Carc. 1B H350 May cause cancer.

Repr. 1B H360 May damage fertility or the unborn child.

Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2A H319 Causes serious eye irritation.

Skin Sens. 1 H317 May cause an allergic skin reaction.

STOT SE 3 H336 May cause drowsiness or dizziness.

- · Label elements
- · GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).
- · Hazard pictograms







GHS02

11502 01150

- · Signal word Danger
- · Hazard-determining components of labeling: citrus terpene

(Contd. on page 2)

Printing date 09/16/2015 Reviewed on 06/02/2015

Trade name: PPC-1

(Contd. of page 1)

acetone

Solvent naphtha (petroleum), light arom.

N-methyl-2-pyrrolidone

· Hazard statements

H225 Highly flammable liquid and vapor.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H317 May cause an allergic skin reaction.

H340 May cause genetic defects.

H350 May cause cancer.

H360 May damage fertility or the unborn child.

H336 May cause drowsiness or dizziness.

H304 May be fatal if swallowed and enters airways.

· Precautionary statements

· Frecuitionary s	utiements
P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P241	Use explosion-proof electrical/ventilating/lighting/equipment.
P261	Avoid breathing dust/fume/gas/mist/vapors/spray
P280	Wear protective gloves / eye protection / face protection.
P240	Ground/bond container and receiving equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P264	Wash thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
P272	Contaminated work clothing must not be allowed out of the workplace.
P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER/doctor.

P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present

and easy to do. Continue rinsing. Specific treatment (see on this label).

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P312 Call a POISON CENTER/doctor if you feel unwell.

P363 Wash contaminated clothing before reuse.

P308+P313 IF exposed or concerned: Get medical advice/attention.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P337+P313 If eye irritation persists: Get medical advice/attention.

P331 Do NOT induce vomiting.

P370+P378 In case of fire: Use for extinction: CO2, powder or water spray. P362+P364 Take off contaminated clothing and wash it before reuse.

P405 Store locked up.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P403+P235 Store in a well-ventilated place. Keep cool.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· Classification system:

· NFPA ratings (scale 0 - 4)



P321

Health = 1 Fire = 3 Reactivity = 0

(Contd. on page 3)

Printing date 09/16/2015 Reviewed on 06/02/2015

Trade name: PPC-1

· HMIS-ratings (scale 0 - 4)

(Contd. of page 2)



- · Other hazards
- · Results of PBT and vPvB assessment
- · **PBT**: Not applicable. · **vPvB**: Not applicable.

3 Composition/information on ingredients

- · Chemical characterization: Mixtures
- · Description:

Mixture of the substances listed below with nonhazardous additions.

Component names which have the word (contaminant) are constituents in Aromatic hydrocarbon ingredients and are an integral part of the ingredient and cannot be separated. The percentage listed for the contaminant is as contained in the Hydrocarbon ingredient. Example: 100% hydrocarbon, 10% Contaminant A, 3% Contaminant B

· Dangerous components:		
67-64-1	acetone	40-60%
107-98-2	1-methoxy-2-propanol	10-20%
	citrus terpene	10-20%
	N-methyl-2-pyrrolidone	1-10%
	Solvent naphtha (petroleum), light arom.	1-10%
	1,2,4-trimethylbenzene (contaminant)	1-5%
	mesitylene (contaminant)	<1%
98-82-8	cumene (contaminant)	<1%

4 First-aid measures

- · Description of first aid measures
- · After inhalation:

Supply fresh air; consult doctor in case of complaints.

In case of unconsciousness place patient stably in side position for transportation.

- · After skin contact: Immediately wash with water and soap and rinse thoroughly.
- · After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

- · After swallowing: If symptoms persist consult doctor.
- · Information for doctor:
- · Most important symptoms and effects, both acute and delayed No further relevant information available.
- · Indication of any immediate medical attention and special treatment needed No further relevant information available.

5 Fire-fighting measures

- · Extinguishing media
- · Suitable extinguishing agents: CO2, sand, extinguishing powder. Do not use water.
- · For safety reasons unsuitable extinguishing agents: Water with full jet

(Contd. on page 4)

Printing date 09/16/2015 Reviewed on 06/02/2015

Trade name: PPC-1

(Contd. of page 3)

- · Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters
- · Protective equipment: No special measures required.

6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

- · Environmental precautions: For large spills: Do not allow to enter sewers/ surface or ground water.
- · Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

Do not flush with water or aqueous cleansing agents

· Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

- · Handling:
- · Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Open and handle receptacle with care.

Prevent formation of aerosols.

· Information about protection against explosions and fires:

Keep ignition sources away - Do not smoke.

Protect from heat.

Protect against electrostatic charges.

Keep respiratory protective device available.

- · Conditions for safe storage, including any incompatibilities
- · Storage:
- · Requirements to be met by storerooms and receptacles: Store in a cool location.
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions:

Keep receptacle tightly sealed.

Store in cool, dry conditions in well sealed receptacles.

Protect from heat and direct sunlight.

· Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

- · Additional information about design of technical systems: No further data; see item 7.
- · Control parameters
- · Components with limit values that require monitoring at the workplace:

67-64-1 acetone

PEL Long-term value: 2400 mg/m³, 1000 ppm

(Contd. on page 5)

Printing date 09/16/2015 Reviewed on 06/02/2015

Trade name: PPC-1

	(Contd. of page 4
REL	Long-term value: 590 mg/m³, 250 ppm
TLV	Short-term value: 1187 mg/m³, 500 ppm
	Long-term value: 594 mg/m³, 250 ppm
	BEI
107-9	98-2 1-methoxy-2-propanol
REL	Short-term value: 540 mg/m³, 150 ppm
	Long-term value: 360 mg/m³, 100 ppm
TLV	Short-term value: 369 mg/m³, 100 ppm
	Long-term value: 184 mg/m³, 50 ppm
872-5	50-4 N-methyl-2-pyrrolidone
WEE	L Long-term value: 10 ppm
	Skin
95-63	3-6 1,2,4-trimethylbenzene (contaminant)
REL	Long-term value: 125 mg/m³, 25 ppm
TLV	Long-term value: 123 mg/m³, 25 ppm
· Ingre	edients with biological limit values:
67-64	4-1 acetone
BEI .	50 mg/L
	Medium: urine
	Time: end of shift
	Parameter: Acetone (nonspecific)
872-5	50-4 N-methyl-2-pyrrolidone
BEI	100 mg/L
	Medium: urine
	Time: end of shift
	Parameter: 5-Hydroxy-N-methyl-2-pyrrolidone

- · Additional information: The lists that were valid during the creation were used as basis.
- · Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Store protective clothing separately.

Avoid contact with the eyes and skin.

· Breathing equipment:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

· Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation (Contd. on page 6)

(Contd. of page 5)

Safety Data Sheet acc. to OSHA HCS

Reviewed on 06/02/2015 Printing date 09/16/2015

Trade name: PPC-1

· Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection:



Water:

· Partition coefficient (n-octanol/water): Not determined.

Tightly sealed goggles

0 DI					1	2.0
9 Ph	sical	and	c_{I}	remical	nro	nerties

· Information on basic physical and c · General Information	hemical properties
· Appearance:	
Form:	Fluid
Color:	According to product specification
· Odor:	Characteristic
· Odour threshold:	Not determined.
· pH-value:	Not determined.
· Change in condition	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	55 °C (131 °F)
· Flash point:	-17 °C (1 °F)
· Flammability (solid, gaseous):	Not applicable.
· Ignition temperature:	255 °C (491 °F)
· Decomposition temperature:	Not determined.
· Auto igniting:	Product is not selfigniting.
· Danger of explosion:	Product is not explosive. However, formation of explosive air/vapor mixtures are possible.
· Explosion limits:	
Lower:	0.7 Vol %
Upper:	20.0 Vol %
· Vapor pressure at 20 °C (68 °F):	233 hPa (175 mm Hg)
· Density at 20 °C (68 °F):	0.8446 g/cm³ (7.048 lbs/gal)
· Relative density	Not determined.
· Vapour density	Not determined.
Evaporation rate	Not determined.
· Solubility in / Miscibility with	
***	3 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4

Not miscible or difficult to mix.

(Contd. on page 7)

Printing date 09/16/2015 Reviewed on 06/02/2015

Trade name: PPC-1

		(Contd. of page 6
· Viscosity:		
Dynamic:	Not determined.	
Kinematic:	Not determined.	
· Solvent content:		
VOC content:	293.0 g/l / 2.45 lb/gl	
· Other information	No further relevant information available.	

10 Stability and reactivity

- · Reactivity No further relevant information available.
- · Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:

· LD/LC50 v	alues that	are relevant for classification:
94266-47-4	4 citrus ter	pene
Oral	LD50	>5000 mg/kg (rabbit)
Dermal	LD50	>5000 mg/kg (rabbit)
872-50-4 N	l-methyl-2	-pyrrolidone
Oral	LD50	3914 mg/kg (rat)
Dermal	LD50	8000 mg/kg (rabbit)
64742-95-0	Solvent n	naphtha (petroleum), light arom.
Oral	LD50	>6800 mg/kg (rat)
Dermal	LD50	>3400 mg/kg (rab)
Inhalative	LC50/4 h	>10.2 mg/l (rat)
95-63-6 1,2	2,4-trimeth	ylbenzene (contaminant)
Oral	LD50	5000 mg/kg (rat)

- · Primary irritant effect:
- · on the skin: Irritant to skin and mucous membranes.
- · on the eye: Irritating effect.
- · Sensitization: Sensitization possible through skin contact.
- · Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations: Irritant

· Carcinogenic categories

· IARC (International Agency for Research on Cancer)		
1330-20-7	xylene (contaminant)	3
98-82-8	cumene (contaminant)	2B

(Contd. on page 8)

Printing date 09/16/2015 Reviewed on 06/02/2015

Trade name: PPC-1

(Contd. of page 7)

· NTP (National Toxicology Program)

98-82-8 cumene (contaminant)

R

· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

12 Ecological information

- · Toxicity
- · Aquatic toxicity:

94266-47-4 citrus terpene

EC50 (static) 0.36 mg/kg (daphnia)

- · Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · Ecotoxical effects:
- · Remark: Toxic for fish
- · Additional ecological information:
- · General notes:

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system. Also poisonous for fish and plankton in water bodies.

Toxic for aquatic organisms

- · Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.
- · Other adverse effects No further relevant information available.

13 Disposal considerations

- · Waste treatment methods
- · Recommendation:

Dispose of content and/or container in accordance with local, regional, national and/or international regulations.

- · Uncleaned packagings:
- · Recommendation:

Dispose of content and/or container in accordance with local, regional, national and/or international regulations

14 Transport information

- $\cdot \textit{UN-Number}$
- · DOT, IMDG, IATA UN1993
- · UN proper shipping name
- **DOT** Flammable liquids, n.o.s. (Acetone)
- · IMDG, IATA FLAMMABLE LIQUID, N.O.S. (ACETONE)

(Contd. on page 9)

Printing date 09/16/2015 Reviewed on 06/02/2015

Trade name: PPC-1

(Contd. of page 8) · Transport hazard class(es) $\cdot DOT$ · Class 3 Flammable liquids · Label · IMDG, IATA · Class 3 Flammable liquids · Label · Packing group · DOT, IMDG, IATA II· Environmental hazards: · Marine pollutant: Yes · Special precautions for user Warning: Flammable liquids · Danger code (Kemler): 33 · EMS Number: F-E,S-E· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable. · Transport/Additional information: $\cdot DOT$ · Quantity limitations On passenger aircraft/rail: 5 L On cargo aircraft only: 60 L · IMDG · Limited quantities (LQ) 1L· Excepted quantities (EQ) Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml · UN "Model Regulation": UN 1993 FLAMMABLE LIQUIDS, N.O.S. (ACETONE), 3, II

15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Sara
- · Section 355 (extremely hazardous substances):

None of the ingredients is listed.

· Section 313 (Specific toxic chemical listings):

872-50-4 N-methyl-2-pyrrolidone

95-63-6 1,2,4-trimethylbenzene (contaminant)

(Contd. on page 10)

Printing date 09/16/2015 Reviewed on 06/02/2015

Trade name: PPC-1

		(Contd. of page 9)
1330-20-7	xylene (contaminant)	\ 1 & /
98-82-8	cumene (contaminant)	
· TSCA (To	xic Substances Control Act):	
All ingred	ients are listed.	
This prodi	s known to cause cancer: uct contains a chemical known to the state of California to cause cancer	
98-82-8 c	umene (contaminant)	
· Chemicals	s known to cause reproductive toxicity for females:	
None of th	e ingredients is listed.	
· Chemicals	s known to cause reproductive toxicity for males:	
None of th	e ingredients is listed.	
· Chemicals	s known to cause developmental toxicity:	
872-50-4	N-methyl-2-pyrrolidone	
· Carcinoge	enic categories	
· EPA (Env	ironmental Protection Agency)	
67-64-1	acetone	I
1330-20-7	xylene (contaminant)	I
98-82-8	cumene (contaminant)	D, CBD
· TLV (Thr	eshold Limit Value established by ACGIH)	
67-64-1	acetone	A4

· NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

1330-20-7 xylene (contaminant)

- · GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).
- · Hazard pictograms







GHS02

GHS07

GHS08

· Signal word Danger

· Hazard-determining components of labeling:

citrus terpene

acetone

Solvent naphtha (petroleum), light arom.

N-methyl-2-pyrrolidone

· Hazard statements

 ${\it H225~Highly~flammable~liquid~and~vapor}.$

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H317 May cause an allergic skin reaction.

H340 May cause genetic defects.

H350 May cause cancer.

H360 May damage fertility or the unborn child.

H336 May cause drowsiness or dizziness.

(Contd. on page 11)

A4

Printing date 09/16/2015 Reviewed on 06/02/2015

Trade name: PPC-1

P321

(Contd. of page 10)

H304 May be fatal if swallowed and enters airways.

	•	Precautionary	statements
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P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P241	Use explosion-proof electrical/ventilating/lighting/equipment.
P261	Avoid breathing dust/fume/gas/mist/vapors/spray
P280	Wear protective gloves / eye protection / face protection.

P240 Ground/bond container and receiving equipment.

P242 Use only non-sparking tools.

P243 Take precautionary measures against static discharge.

P264 Wash thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.

P272 Contaminated work clothing must not be allowed out of the workplace.

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.

P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

 $P305 + P351 + P338\ If\ in\ eyes:\ Rinse\ cautiously\ with\ water\ for\ several\ minutes.\ Remove\ contact\ lenses,\ if\ present$

and easy to do. Continue rinsing. Specific treatment (see on this label).

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P312 Call a POISON CENTER/doctor if you feel unwell.

P363 Wash contaminated clothing before reuse.

P308+P313 IF exposed or concerned: Get medical advice/attention.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

P337+P313 If eye irritation persists: Get medical advice/attention.

P331 Do NOT induce vomiting.

P370+P378 In case of fire: Use for extinction: CO2, powder or water spray. P362+P364 Take off contaminated clothing and wash it before reuse.

P405 Store locked up.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P403+P235 Store in a well-ventilated place. Keep cool.

P501 Dispose of contents/container in accordance with local/regional/national/international

regulations.

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- · Department issuing SDS: Environment protection department.
- · Contact: Mr. Collins
- · Date of preparation / last revision 09/16/2015 / -
- · Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

 ${\it HMIS: Hazardous\ Materials\ Identification\ System\ (USA)}$

VOC: Volatile Organic Compounds (USA, EU)

(Contd. on page 12)

(Contd. of page 11)

Safety Data Sheet acc. to OSHA HCS

Printing date 09/16/2015 Reviewed on 06/02/2015

Trade name: PPC-1

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative Flam. Liq. 2: Flammable liquids, Hazard Category 2 Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

Eye Irrit. 2A: Serious eye damage/eye irritation, Hazard Category 2A

Skin Sens. 1: Sensitisation - Skin, Hazard Category 1 Muta. 1B: Germ cell mutagenicity, Hazard Category 1B Carc. 1B: Carcinogenicity, Hazard Category 1B Repr. 1B: Reproductive toxicity, Hazard Category 1B

STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3

Asp. Tox. 1: Aspiration hazard, Hazard Category 1